

# REDSTONE GATEWAY

# PACKAGE 1 E - RIDEOUT ROAD INTERIM IMPROVEMENTS

FOR THE CITY OF HUNTSVILLE HUNTSVILLE, ALABAMA

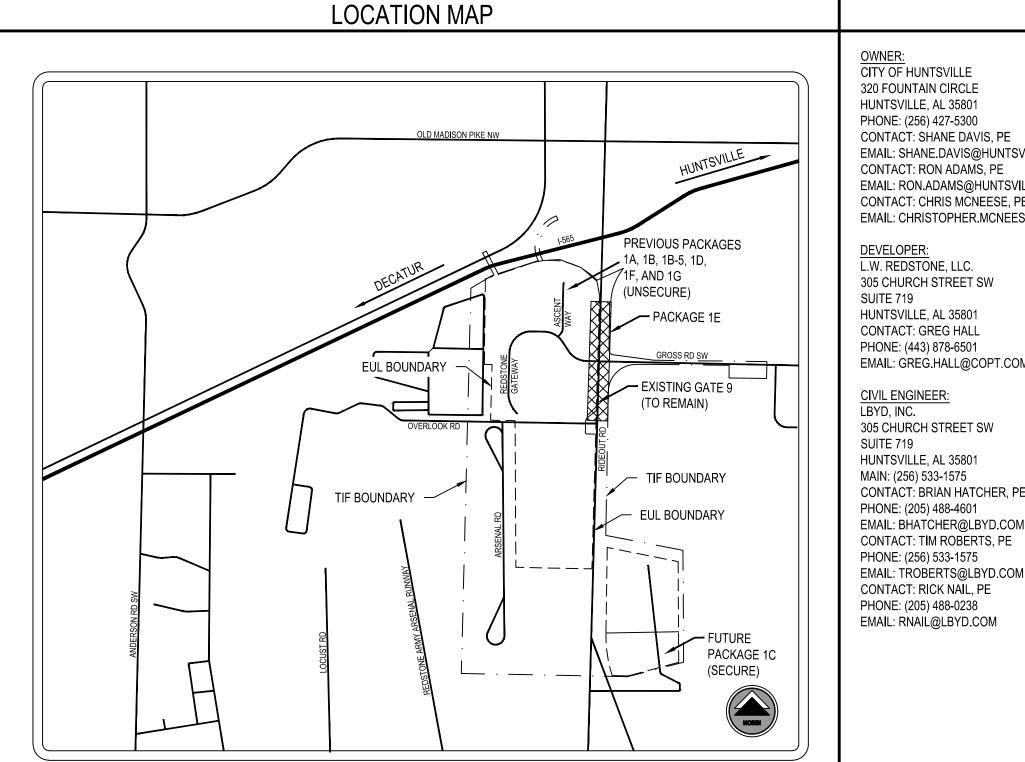
BID SET



LBYD, INC. PROJECT NO. 302-10-002A CITY OF HUNTSVILLE PROJECT NO. 65-11-SP08

NOVEMBER 14, 2011

NOTE: FOR PLOTTING PURPOSES GRAY SHADES ARE PRESENT 24" X 36" FULL SIZE SHEETS



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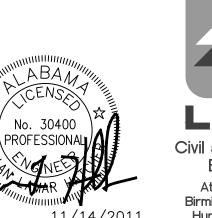
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DETAILS









#### GENERAL NOTES:

- 1. LBYD, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE CONTRACTOR'S WORK OR RESPONSIBILITIES. LBYD IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION. IT IS NOT LBYD'S DUTY TO REVIEW THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN OR NEAR THE CONSTRUCTION SITE.
- 2. ALL EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND OTHER UTILITIES MAY EXIST. CONTRACTOR MUST HAVE EXISTING UTILITIES LOCATED BY UNDERGROUND LINE LOCATORS AS WELL AS FIELD VERIFIED BY ONSITE PERSONNEL BY "POT HOLING" THE UTILITY WITH POST HOLE DIGGERS PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.

3. EXISTING UTILITIES TO REMAIN MAY BE LOCATED WITHIN PROPOSED DEMOLITION AREAS. CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING IN THESE AREAS TO ENSURE NO UTILITY SERVICE INTERRUPTIONS TO FACILITIES THAT REMAIN OR TO ADJACENT PROPERTIES.

4. ALL EXISTING IMPROVEMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO REMAIN UNLESS SPECIFICALLY NOTED, "TO BE REMOVED."

5. CONTRACTOR SHALL COORDINATE WITH OWNER AND THE UTILITY PROVIDER PRIOR TO THE DISCONNECTING OR REMOVAL OF ANY UTILITY SERVICE. ALL UTILITIES TO BE REMOVED ARE TO BE CAPPED OR PLUGGED OR TERMINATED ACCORDING TO THE UTILITY OWNERS REQUIREMENTS.

6. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS ON OR OFF SITE DUE TO THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

7. WHEN CAVES OR SOLUTION CAVITIES ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL STOP IN THE AREA PENDING FURTHER BIOLOGICAL AND GEOTECHNICAL INVESTIGATIONS.

8. IF DURING CONSTRUCTION THE CONTRACTOR OBSERVES HISTORIC OR ARCHAEOLOGICAL RESOURCES, THEN SUCH OBSERVATIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER. THE CONTRACTOR SHALL CEASE ALL ACTIVITIES IN THE AREA THAT MAY RESULT IN THE DESTRUCTION OF THESE RESOURCES AND SHALL PREVENT EMPLOYEES FROM TRESPASSING ON, REMOVING, OR OTHERWISE DAMAGING SUCH RESOURCES UNTIL RELEASED BY THE OWNER.

9. <u>MILITARY MUNITIONS</u> - BASED ON THE ENVIRONMENTAL ASSESSMENT THE EUL SITE HAS NOT BEEN IDENTIFIED AS HAVING THE POTENTIAL OF UNEXPLODED ORDINANCE (UXO). IN THE EVENT THAT THE CONTRACTOR DISCOVERS OR UNCOVERS MILITARY MUNITIONS AS DEFINED IN 40 CFR 260, HAZARDOUS WASTE MANAGEMENT SYSTEM HE SHALL STOP WORK IN THAT AREA AND NOTIFY THE OWNER.

10. STORMWATER IMPACTS SHALL BE MINIMIZED DURING CONSTRUCTION WITH APPROPRIATE BMP MEASURES PER THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A PLAN FOR SECONDARY CONTAINMENT OF STORED FUEL, DRIP PANS UNDER GENERATORS AND STATIONARY VEHICLES, AND

MAINTAINING SPILL MITIGATION KITS ON-SITE DURING CONSTRUCTION.

11. WASTE MATERIALS SHALL BE RECYCLED TO THE MAXIMUM EXTENT FEASIBLE.

12. FENCE REMOVAL AND INSTALLATION OPERATIONS SHALL BE ACCOMPLISHED SO THAT THE PERIMETER SECURITY OF THE EXISTING FACILITIES SHALL BE MAINTAINED AT ALL TIMES MEETING ANTI-TERRORISM/FORCE PROTECTION (AT/FP) REQUIREMENTS.

13. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION. NOTE THAT NOT ALL SECTIONS OF THE CITY SPECIFICATIONS WILL APPLY TO THIS PROJECT.

14. CONCRETE SHALL BE 3,000 PSI 28 DAY STRENGTH UNLESS OTHERWISE NOTED ON THE PLANS.

15. EXISTING ROADWAYS SHALL BE KEPT FREE OF MUD, SEDIMENT, DEBRIS, ETC. AND SHALL BE CLEANED ON A REGULAR BASIS - AS A MINIMUM DAILY

16. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADHERE TO THE REQUIREMENTS OF THE ENVIRONMENTAL ASSESSMENT FOR THE NORTH RIDEOUT ROAD ENHANCED USE LEASE SITE DEVELOPMENT AT REDSTONE ARSENAL, AL DATED DECEMBER 2008.

17. SITE WORK IS CURRENTLY ONGOING AT THE SITE AND THE INFORMATION SHOWN HEREIN REFLECT THE FINISHED CONDITION OF PACKAGE 1A - MASS GRADING AND EROSION CONTROL PACKAGE (UNSECURE AREA) DATED DECEMBER 16, 2010, PACKAGE 1B - ROADWAY AND UTILITIES (UNSECURE AREA) DATED APRIL 12, 2011, PACKAGE 1B-5 - GRAVITY SANITARY SEWER DATED APRIL 12, 2011, PACKAGE 1D - RAILROAD SPUR RELOCATION /INSTALLATION DATED MAY 13, 2011, PACKAGE 1F - REDSTONE GATEWAY EXTENSION, MARKET STREET, AND OVERLOOK ROAD RELOCATION (UNSECURE AREA), AND PACKAGE 1G -LANDSCAPING. THE ELEVATIONS SHOWN ON THESE PLANS ARE TO FINISHED GRADE ELEVATION. THE PACKAGE 1E CONTRACTOR SHALL REVIEW THE PACKAGE 1B AND 1F PLANS AND SPECIFICATIONS TO MAKE THEMSELVES FAMILIAR WITH THE PHASING OF PACKAGE 1B AND 1F AND HOW IT WILL IMPACT THEIR PACKAGE 1E SCOPE AND SCHEDULING OF WORK. FURTHER NOTE THAT OFFICE BUILDINGS AND RETAIL ARE CURRENTLY UNDER CONSTRUCTION AND PACKAGE 1E WORK WILL HAVE TO COORDINATE DELIVERIES AND ACCESS WITH ALL OF THE ABOVE MENTIONED PROJECTS. REDSTONE ARSENAL DIRECTORATE OF PUBLIC WORKS WILL BE RELOCATING GOSS ROAD DURING THE CONSTRUCTION OF THIS PACKAGE. COORDINATION OF DEMOLISHED ITEMS AS WELL AS THE OPERATION OF THE EXISTING SIGNAL AND ACCESS TO THE VISITOR'S CENTER.

#### SITE DEMOLITION NOTES:

1. CONTRACTOR TO COORDINATE DEMOLITION ITEMS NOTED ON THE DRAWINGS TO BE SALVAGED, RECYCLED, AND REUSED. CONTRACTOR SHALL REMOVE THE CONCRETE AND STEEL POWER POLES TO BE SALVAGED WITH EXTREME CAUTION TO PREVENT DAMAGE AND STOCKPILE THEM IN AREA NOTED ON THE PLANS.

2. REFER TO SITE GRADING, DRAINAGE, AND UTILITY PLANS FOR PROPOSED UTILITY AND DRAINAGE INSTALLATION AND REMOVAL.

3. REFER TO LAYOUT, GRADING, AND UTILITY PLANS FOR ADDITIONAL INFORMATION RELATING TO PAVING, CURB, SIDEWALKS, ETC. REMOVE EXISTING CURBS AS NEEDED TO INSTALL PROPOSED IMPROVEMENTS.

4. CONTRACTOR SHALL COORDINATE WITH CITY OF HUNTSVILLE (OWNER), REDSTONE ARSENAL, LBYD, THE PROJECT

MANAGER, AND THE UTILITY PROVIDER PRIOR TO THE DISCONNECTING OF ANY UTILITY SERVICE.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, RELOCATION OR PROTECTION OF ALL ABOVE AND BELOW GROUND EXISTING IMPROVEMENTS THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS UNLESS NOTED TO BE RELOCATED BY THE UTILITY SERVICE PROVIDER.

6. ALL DEMOLITION AND CONSTRUCTION DEBRIS SHALL BE RECYCLED TO THE MAXIMUM EXTENT FEASIBLE. REMAINING WASTE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE TRANSPORTED AND DISPOSED OF OFF-SITE AS REQUIRED IN A LEGAL MANNER WHILE KEEPING THE SITE CLEAN AND ORDERLY.

7. ALL EXISTING PAVING, CURBS, HARDSCAPE, ETC. SHALL BE SAW CUT AT THE LIMITS OF REMOVAL IN ORDER TO PROVIDE A CLEAN EDGE. EXISTING PAVING AT EDGE SHALL BE MILLED BACK A MINIMUM OF 8" TO ENSURE SMOOTH TRANSITION.

TRANSITION.

8. ALL EXISTING TREES TO REMAIN OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED DURING CONSTRUCTION.

9. BACKFILLING OF DEMOLISHED ITEMS SHALL BE SUITABLE FILL OR STONE PER THE PROJECT SPECIFICATIONS

SUPPLEMENTAL SPECIFICATIONS EARTHWORK.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND PUMPING AS NECESSARY FOR EROSION CONTROL FOR OWN SCOPE OF WORK.

#### LAYOUT NOTES:

1. CONTRACTOR SHALL VERIFY SITE BOUNDARY AND EXISTING TOPOGRAPHY. NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO SUBMITTING PRICES OR ORDERING MATERIALS.

2. THE OWNER WILL BE DESDONSIBLE FOR PROVIDING RENCHMARKS. CONTROLS AND FINAL ELECTRONIC AS BUILT.

THE OWNER WILL BE RESPONSIBLE FOR PROVIDING BENCHMARKS, CONTROLS, AND FINAL ELECTRONIC AS-BUILT DRAWINGS.
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL BENCHMARKS, PROPERTY CORNERS, AND ALDOT

MONUMENTATION. ANY REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND A "RED-LINED" SET OF CLEAN CONSTRUCTION DOCUMENTS TO SERVE AS THE CONTRACTOR'S AS BUILTS FOR OWN SCORE OF WORK

CONSTRUCTION DOCUMENTS TO SERVE AS THE CONTRACTOR'S AS-BUILTS FOR OWN SCOPE OF WORK.

5. ALL DIMENSIONS AND COORDINATES SHOWN ARE TO THE BACK OF CURB OR TO THE EDGE OF SURFACING UNLESS OTHERWISE NOTED.

ALL TEMPORARY STRIPING TO BE PER THE LATEST EDITION OF THE MUTCD UNLESS NOTED OTHERWISE.
 ALL PERMANENT STRIPING SHALL BE THERMOPLASTIC PER CITY OF HUNTSVILLE STANDARDS SPECIFICATION SECTION 701.
 BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY THE OWNER AND PERFORMED BY BUSBIN ENGINEERING.

9. TOPOGRAPHIC INFORMATION WAS PERFORMED VIA GROUND RUN AND AERIAL FORMAT AND TAKEN FROM PREVIOUS DESIGN PLANS FOR PACKAGE 1A DATED DECEMBER 16, 2010, PACKAGE 1B DATED APRIL 12, 2011, AND PACKAGE 1F DATED SEPTEMBER 15, 2011.

#### TRAFFIC CONTROL NOTES:

1. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST EDITION AND REVISION OF PART VI OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE APPROVED TRAFFIC CONTROL PLAN FOR ALL CONSTRUCTION WITHIN WORK AREAS SHOWN AND DESCRIBED IN PART VI OF THE MUTCD.

2. ACCESS TO THE VISITOR'S CENTER SHALL BE MAINTAINED AT ALL TIMES AND SHALL MEET THE REQUIREMENTS OF REDSTONE ARSENAL.

3. TRAFFIC CONTROL AND ACCESS SHALL TAKE INTO CONSIDERATION BASE SECURITY MEASURES.
4. PERMANENT ROADWAY SIGNS OR TEMPORARY CONSTRUCTION SIGNS WHICH ARE NOT APPLICABLE OR INAPPROPRIATE FOR THE CURRENT CONDITIONS SHALL BE COVERED OR REMOVED.

5. THE DIMENSIONS SHOWN OR DESCRIBED FOR LOCATING CONSTRUCTION SIGNS ARE NOMINAL. THE ACTUAL DIMENSIONS SHALL BE ADJUSTED TO BEST FIT LOCAL CONDITIONS AND PROVIDE MAXIMUM VISIBILITY.

6. IE TRAFFIC CONTROL DEVICES ARE NECESSARY FOR PROPER WARNING AND TRAFFIC CONTROL AFTER SLINSET. THEN AS

6. IF TRAFFIC CONTROL DEVICES ARE NECESSARY FOR PROPER WARNING AND TRAFFIC CONTROL AFTER SUNSET, THEN AS A MINIMUM, TYPE "B" WARNING LIGHTS SHALL BE PLACED ON THE FIRST WARNING SIGN AND CHANNELIZING DRUM AND TYPE "A" REFLECTIVE SHEETING SHALL BE REQUIRED ON ALL SIGNS.

7. HAZARDOUS CONDITIONS ON OPEN ROADWAYS SUCH AS PAVEMENT DROP-OFFS IN EXCESS OF 2"; CONSTRUCTION MATERIALS, VEHICLES, OR EQUIPMENT STORED OR PLACED WITHIN THE ROADWAY RIGHT-OF-WAY; AND OPEN TRENCHES ACROSS OR NEAR THE ROADWAY SHALL NOT BE ALLOWED UNLESS THE CONTRACTOR IS ON SITE AND WORKING, AND PROPER TRAFFIC CONTROL MEASURES ARE BEING TAKEN- INCLUDING BARRICADES.

8. THE CONTRACTOR SHALL KEEP OPEN ROADWAYS CLEAN AND FREE OF CONSTRUCTION DEBRIS, DIRT, LOOSE GRAVEL OR OTHER MATERIAL THAT MAY CAUSE HAZARDOUS DRIVING CONDITIONS.

9. TRAFFIC CONTROL DEVICES SHALL MEET THE STANDARD MATERIAL AND INSTALLATION REQUIREMENTS SPECIFIED IN THE CURRENT EDITION OF THE AL.D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

10. ROADWAYS AND DRIVEWAYS SHALL REMAIN OPEN DURING CONSTRUCTION.

CHANNELIZING DEVICES SHALL BE PLACED AT 10' ON CENTER ALONG MINIMUM 20' RADII TO CHANNELIZE TRAFFIC INTO AND OUT OF INTERSECTING ROAD AND DRIVES WITHIN AREAS WHERE CHANNELIZING DEVICES ARE REQUIRED. TEMPORARY REGULATORY SIGNS SUCH AS STOP SIGNS AND YIELD SIGNS SHALL BE PLACED AS NECESSARY FOR PROPER TRAFFIC CONTROL IN ACCORDANCE WITH THE MUTCD.

11. CONTRACTOR SHALL UTILIZE FLAGMEN AND SIGNAGE AS NEEDED TO ASSURE SAFE ACCESS TO AND FROM THE VISITOR'S CENTER.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SITE CONSTRUCTION TRAFFIC CONTROL PLAN TO BE APPROVED BY THE CITY OF HUNTSVILLE AND REDSTONE ARSENAL PRIOR TO CONSTRUCTION. THE SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL TAKE INTO ACCOUNT THE ENTERING AND EXITING OF CONSTRUCTION TRAFFIC ONTO THE ROADWAY AND THE IMPACT TO THE FLOW OF TRAFFIC. THIS PLAN SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. THIS SITE CONSTRUCTION TRAFFIC CONTROL PLAN SHALL BE IN ADDITION TO ANY TRAFFIC LOGISTICS PLANS PROVIDED IN THIS PLAN SET FOR ROADWAY IMPROVEMENTS.

13. CONTRACTOR SHALL PHASE TRAFFIC CONTROL PLAN AS NEFDED TO ALLOW CONTINUOUS ACCESS TO THE EXISTING.

13. CONTRACTOR SHALL PHASE TRAFFIC CONTROL PLAN AS NEEDED TO ALLOW CONTINUOUS ACCESS TO THE EXISTING VISITOR CENTER AND THE PACKAGE 1A, 1B, 1B-5, 1D, RG1000, AND RG1200 CONTRACTORS AS NEEDED TO PROTECT THE WORKERS AND TRAVELING PUBLIC.

14. EXISTING ROADWAYS SHALL BE KEPT FREE OF MUD, SEDIMENT, DEBRIS, ETC. AND SHALL BE CLEANED ON A REGULAR BASIS - AS A MINIMUM DAILY.

#### GRADING NOTE

1. THE OWNER WILL BE RESPONSIBLE FOR PROVIDING ITS COMPACTION TESTING. ADDITIONAL COMPACTION TESTING MAYBE REQUIRED AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

2. ALL TOPSOIL SHALL BE STRIPPED WITHIN THE PROPOSED LIMITS OF GRADING AND SHALL BE STOCKPILED ON THE REDSTONE GATEWAY IN AN APPROVED LOCATION FOR LATER USE DURING THIS PACKAGE TO RE-PLATE SLOPES, SHOULDERS, AND MEDIAN AREAS AS INDICATED ON THE PLANS.

3. SUBGRADE IN FILL AREAS SHALL BE PROOF ROLLED WITH A LOADED DUMP TRUCK AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY UNSUITABLE (ORGANIC, SOFT, WET, LOOSE) MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED TO THE SPECIFIED DENSITY AND MOISTURE CONTENT LISTED BELOW.

4. ALL EXPOSED SUBGRADE IN CUT AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12" AND RECOMPACTED TO THE SPECIFIED DENSITY AND MOISTURE CONTENT LISTED BELOW AND IN THE PROJECT SPECIFICATIONS.

5. THE PROJECT IS UNCLASSIFIED TO -12" BELOW SUBGRADE ELEVATION IN CUT AREAS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SUBGRADE AFTER IT HAS BEEN INITIALLY PREPPED,

IF DAMAGED DUE TO INCLEMENT WEATHER OR CONSTRUCTION TRAFFIC.

7. FILL MATERIAL SHALL HAVE THE FOLLOWING PROPERTIES: VIRTUALLY FREE OF ORGANICS, NO ROCK FRAGMENTS GREATER THAN 4" WITHIN 4' OF FINISH GRADE, LIQUID LIMIT NOT EXCEEDING 50, PLASTICITY INDEX NOT EXCEEDING 30, MAXIMUM DRY DENSITY IN EXCESS OF 90 PCF, COMPACTED TO 98% IN PAVED AREAS, PLACED IN 8" TO 10" THICK LOOSE LIFTS, AND WITHIN ±2.0% OF OPTIMUM MOISTURE CONTENT. NOTE THAT SOILS WITHIN 1' OF PAVED AREAS SHALL BE CL/CH SOILS AND HAVE A MAXIMUM LIQUID LIMIT NOT EXCEEDING 50, AND A MAXIMUM PLASTICITY INDEX NOT EXCEEDING 30, COMPACTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN ±2.0% OF OPTIMUM MOISTURE CONTENT. REFER TO SUPPLEMENTAL SPECIFICATIONS EARTHWORK FOR ADDITIONAL INFORMATION.

30, COMPACTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN ±2.0% OF OPTIMUM MOISTURE CONTENT. REFER TO SUPPLEMENTAL SPECIFICATIONS EARTHWORK FOR ADDITIONAL INFORMATION.

8. COMPACTION TESTS WILL BE TAKEN AT THE RECOMMENDATION OF THE ON-SITE GEOTECHNICAL ENGINEER, BUT AT A MINIMUM EVERY 2,500 SQUARE FEET OF AREA PER 8" LIFT IN PAVING AREAS.

9. COMPACTION WITHIN LIMITED SPACES (I.E. MANHOLES, INLETS, UTILITY TRENCHES) SHOULD BE BACKFILLED AND COMPACTED SYSTEMATICALLY, AT THE DIRECTION OF THE OWNER'S ONSITE REPRESENTATIVE. STONE BACKFILL SHALL BE INSTALLED IN 8" LOOSE LIFTS AND COMPACTED TO 95% STANDARD PROCTOR PER CITY OF HUNTSVILLE STANDARD SPECIFICATIONS SECTION 105 AND 107 AS MODIFIED IN THE SUPPLEMENT TO GENERAL REQUIREMENTS.

10. CLEARING LIMITS SHALL BE 5' OUTSIDE OF ALL PROPOSED GRADED AREAS OR NOT BEYOND THE PROPERTY LINES OR

CLEARING LIMITS WHICHEVER IS LESS.

11. NO GRADING OFF-SITE OR IN ALDOT DENIED ACCESS RIGHT-OF-WAY WITHOUT PROPER APPROVALS AND PRIOR

NOTIFICATION.

12. COORDINATE THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.

12. COORDINATE THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.

13. PROPOSED GRADES INDICATED ON THIS PLAN ARE TO FINISH GRADE. THE CONTRACTOR SHALL MAKE SUBGRADE ADJUSTMENTS FOR TOPSOIL, PAVING, ETC.

ADJUSTMENTS FOR TOPSOIL, PAVING, ETC.

14. FILL SLOPES SHOULD BE BENCHED INTO THE EXISTING SLOPES AND SHOULD BE COORDINATED WITH THE OWNER FOR DEPTH OF BENCH INTO THE SLOPE.

15. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY BUILDING AND EARTH SCIENCES, INC. PROJECT NUMBER HV10019 DATED MAY20, 2011 AND IS AVAILABLE FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL REVIEW THIS REPORT, VISIT THE SITE AND OBSERVE THE ADDITIONAL EXPLORATION PROVIDED BY THE OWNER AFTER THE PRE-BID MEETING IN ORDER FOR THE CONTRACTOR TO PROVIDE A RESPONSIVE BID.

16. UNSUITABLE MATERIAL REFERS TO MATERIAL THAT IS NOT SUITABLE FOR PAVEMENT SUPPORT FOR REASONS ASSOCIATED WITH MATERIAL PROPERTIES, SUCH AS HIGHLY PLASTIC SOILS, "FAT" CLAYS, ORGANICS, AND OLD FILL. MATERIAL WHICH IS OTHERWISE SUITABLE, BUT ABOVE THE OPTIMUM MOISTURE AND REQUIRES MOISTURE CONDITIONING PRIOR TO USE AS STRUCTURAL FILL SHALL NOT BE CONSIDERED AS "UNSUITABLE". NOTE ADDITIVE AND DEDUCTIVE UNIT PRICES ARE BEING PROVIDED TO HANDLE CHANGING FIELD CONDITIONS DURING CONSTRUCTION AS NEEDED.

17. DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED. IF GROUNDWATER DEWATERING IS REQUIRED,

CONTRACTOR IS TO OBTAIN ANY PERMITS AS MAY BE REQUIRED PRIOR TO DISCHARGE OF EFFLUENT FROM DEWATERING.

#### STORM DRAINAGE NOTES:

1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL STORM PIPE MATERIALS TO THE OWNER AND RECEIVE APPROVAL PRIOR TO INSTALLATION AND/OR FABRICATION.

2. ALL PROPOSED STORM INLETS (GRATES, CURB, YARD, AREA DRAINS) ARE TO BE LOCATED AT THE LOW POINTS.
GRADING SHALL BE TO DIRECT RUNOFF TO THESE INLETS. NOTIFY THE OWNER OF ANY DISCREPANCIES.

STORM DRAINAGE SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION. NOTIFY THE OWNER OF ANY DISCREPANCIES.
 THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED STORM PIPE GRADES AND POINTS OF CONNECTION

PRIOR TO INSTALLATION. THE OWNER SHALL BE NOTIFIED OF ANY DEVIATIONS PRIOR TO OR DURING CONSTRUCTION.

5. PROPOSED STORM PIPES SHALL BE BEDDED IN 4" OF CRUSHED AGGREGATE PER CITY OF HUNTSVILLE DR-166. STORM PIPES LOCATED IN PAVED AREAS AND 5' BEYOND THE BACK OF CURB SHALL BE BACKFILLED WITH #78 STONE UP TO SUBGRADE ELEVATION PER CITY OF HUNTSVILLE DR-166.

6. ALL RIP RAP SHALL BE CLASS 2 PER THE ALABAMA DEPT. OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.

7. ALL STORM PIPES 18" AND GREATER SHALL BE CLASS 3 REINFORCED CONCRETE PIPE (RCP) PER CITY OF HUNTSVILLE STANDARD SPECIFICATIONS SECTION 527 AS MODIFIED IN THE SUPPLEMENT TO GENERAL REQUIREMENTS.

8. ALL STORM MANHOLES SHALL BE APPROVED CONE, RISER, AND BASE SECTIONS WITH GASKETED JOINTS MEETING ALDOT SPECIAL DRAWING # MH-621-2 WITH CITY OF HUNTSVILLE RING AND COVER PER DR-129.

9. ALL SLOPE PAVED HEADWALLS SHALL BE PER CITY OF HUNTSVILLE DR-152A THROUGH DR-152D.

10. CONCRETE BOX CULVERTS SHALL MEET ASTM C1433, AASHTO HS-20 LOADING REQUIREMENTS, AND THE CITY OF HUNTSVILLE STANDARD SPECIFICATIONS SECTION 523 AS MODIFIED IN THE SUPPLEMENT TO GENERAL REQUIREMENTS. BOX CULVERTS MAY BE EITHER PRE-CAST OR CAST-IN-PLACE TYPE CONSTRUCTION MEETING THE ABOVE REQUIREMENTS.

11. ALL SINGLE AND DOUBLE WING CURB INLETS SHALL BE PER CITY OF HUNTSVILLE DR-120A THROUGH DR-120C.

12. ALL YARD INLETS SHALL BE PRECAST INLET BOXES 3-1" x 3-1" OR 4'-2" x 4'-2" DEPENDING ON MAXIMUM PIPE DEFLECTIONS. YARD INLET TOP TO BE PRECAST WITH A RING AND COVER ACCESS PROVIDED THROUGH THE TOP.

13. CONTRACTOR TO PROVIDE "RED-LINED" AS-BUILT DRAWINGS ON STORM PIPING AND STORMWATER DETENTION.

#### EROSION CONTROL NOTES

EXISTING EROSION CONTROL MEASURES INSTALLED IN PACKAGE 1A, 1B, AND 1F. CONTRACTOR WILL BE RESPONSIBLE
FOR MAINTAINING THESE MEASURES LOCATED WITHIN THEIR WORK AREA ONLY.
 ANY TEMPORARY ACCESS ROADS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR RELATED TO THEIR OWN

SCOPE OF WORK.

3. SITE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES,

SITE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODE: AND REGULATIONS.

4. LW REDSTONE, LLC HAS OBTAINED A "NOTICE OF INTENT" (NOI) FROM ADEM #ALR107934 (EXPIRES 3/31/2016). THE OWNER SHALL BE RESPONSIBLE FOR ALL ADEM REQUIRED MONITORING, INSPECTIONS, ETC. TO ENSURE THAT THE SITE IS AT ALL TIMES IN ACCORDANCE WITH ADEM RULES & REGULATIONS. DAILY DOCUMENTATION OF INSPECTIONS BY A Q.C.I. OR Q.C.P. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MAINTAINED BY THE CONTRACTOR ON-SITE AND PROVIDED TO THE OWNER AT HIS/HER REQUEST. ANY AND ALL FEES, FINES, ETC., SHALL BE THE RESPONSIBILITY OF THE

5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING THE CONSTRUCTION PROCESS AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO ADDITIONAL COST TO THE OWNER

6. EROSION CONTROL DEVICES SHOWN ON THESE PLANS ARE A <u>MINIMUM</u>. ADDITIONAL DEVICES SHALL BE INSTALLED AS REQUIRED TO PREVENT SILTATION, EROSION AND OTHER DEGRADATION OR POLLUTION TO THE SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, AND PUBLIC ROADWAYS.

7. EROSION CONTROL DEVICES SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING DEVICES: SILT FENCING, BRUSH BERMS, SEDIMENT BASINS, DETENTION PONDS, STRAW WATTLES, CHECK DAMS, FILTER BERMS, JUTE MATTING, VEGETATIVE FILTER STRIPS, TURF REINFORCEMENT MAT, DIVERSION BERMS, POLYACRYLAMIDE, FLOC BLOCKS, ETC.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES IN GOOD OPERATING

CONDITION DURING ALL LAND DISTURBING ACTIVITIES. THIS RESPONSIBILITY SHALL INCLUDE THE CLEANUP AND/OR REPAIRS TO THE DEVICES AT NO ADDITIONAL COST TO THE OWNER.

9. EROSION CONTROL DEVICES SHALL BE MONITORED AND MAINTAINED UNTIL THE SITE HAS BEEN PERMANENTLY

STABILIZED AND AFTER EACH RAINFALL GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD, ANY WIND GUSTS GREATER THAN 25 MPH, AND ANY SUSTAINED WINDS GREATER THAN 20 MPH IN A 24 HOUR PERIOD.

10. AFTER ALL LAND DISTURBANCE ACTIVITIES HAVE CEASED AND AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED, THE EROSION CONTROL DEVICES SHALL BE REMOVED BY THE CONTRACTOR AND THE AREA

PERMANENTLY STABILIZED, THE EROSION CONTROL DEVICES SHALL BE REMOVED BY THE CONTRACTOR AND THE AREA CLEANED AND DRESSED FOR EACH CONTRACTOR'S WORK AREA. CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE ANY EROSION CONTROL MEASURES UNTIL AREA IS STABILIZED IN WORK AREA BY CONTRACTOR THAT INSTALLED THE EROSION CONTROL MEASURE.

11. DEWATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THEIR SCOPE OF WORK. DEWATERING

OPERATIONS MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR POLLUTION TO ADJACENT PROPERTIES, STREAMS, DITCHES, OR PUBLIC ROADWAYS.

12. ALL LAND DISTURBANCE ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE EXPOSURE OF

BARE AREAS AT ANY ONE TIME.

13. ALL DISTURBED AREAS LEFT INACTIVE FOR MORE THAN 13 DAYS SHALL BE SEEDED AND MULCHED IN ACCORDANCE

WITH ALDOT SPECIFICATIONS SECTION 652 AND 656 AND CITY OF HUNTSVILLE STANDARD SPECIFICATIONS SECTION 653
AND 659.

14. ALL GRADED AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL AND PERMANENT GRASSING UNLESS

OTHERWISE INDICATED.

15. PRIOR TO SITE CLEARING, ALL PERIMETER SILT FENCING, BRUSH BERMS, ETC. AND GRAVELED ACCESS DRIVES SHALL BE INSTALLED. THE OWNER WILL INSPECT AND APPROVE THE INSTALLATION OF THESE MEASURES PRIOR TO RELEASING

SITE WORK CONSTRUCTION.

16. ALL EXISTING STREAMS, DITCHES, ETC. SHALL BE PROTECTED FROM SEDIMENTS AND SILTS BY SILT FENCING, WATTLES, BRUSH BERMS, ETC.

17. WATTLES OR SILT FENCING SHALL BE INSTALLED AT ALL INLETS UPON THE COMPLETION OF EACH INLET AS INSTALLED.
18. RIP RAP SHALL BE PLACED AT EACH HEADWALL IMMEDIATELY FOLLOWING CONSTRUCTION OF EACH HEADWALL.
19. GEOTEXTILE SHALL BE PLACED ON ALL 2:1 SIDE SLOPES. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

20. GEOTEXTILE SHALL BE PLACED ON ALL 3:1 SIDE SLOPES. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

21. GEOTEXTILE SHALL BE PLACED ON ALL DITCH BOTTOMS & TO THE TOP OF SLOPE ON EACH SIDE. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

22. GEOTEXTILE IS NOT REQUIRED ON 4:1 AND FLATTER SLOPES.

#### UTILITY NOTES:

1. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO ANY UTILITY BEING DEMOLISHED REGARDING ITEMS TO BE SALVAGED, RECYCLED, AND REUSED. CONTRACTOR SHALL REMOVE ITEMS TO BE SALVAGED WITH EXTREME CAUTION TO PREVENT DAMAGE. CONTRACTOR SHALL TURN ALL SALVAGED UTILITY ITEMS OVER TO OWNER.

2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL UTILITY INFRASTRUCTURE MATERIALS TO THE OWNER AND RECEIVE APPROVAL PRIOR TO INSTALLATION AND/OR FABRICATION.

3. UTILITY TRENCHES SHALL BE BACKFILLED WITH COMPACTED FILL PLACED IN 8" LOOSE LIFTS. FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR AND OPTIMUM MOISTURE CONTENT WITHIN ±2.0% PER CITY OF HUNTSVILLE STANDARD SPECIFICATIONS SECTION 105 AND 107 AS MODIFIED IN THE SUPPLEMENT TO GENERAL REQUIREMENTS.

4. WHEN INSTALLING UTILITIES IN EXISTING PAVED AREAS, ROADWAYS, OR IN AREAS WHERE SOILS ARE CONSIDERED UNSUITABLE FOR BEDDING OR BACKFILLING, UTILITY TRENCHES SHALL BE BACKFILLED FULL DEPTH WITH #78 STONE PER CITY OF HUNTSVILLE DR-166.

5. REFER TO HUNTSVILLE UTILITIES WATER DEPARTMENT FACILITIES SPECIFICATIONS DATED 2008 FOR ALL WATER SYSTEMS AND HUNTSVILLE UTILITIES ELECTRICAL DEPARTMENT GENERAL SPECIFICATIONS FOR INSTALLATION OF LINDERGROUND LITTLES DATED OCTOBER 2008 FOR ALL ELECTRICAL SYSTEMS

UNDERGROUND UTILITIES DATED OCTOBER 2008 FOR ALL ELECTRICAL SYSTEMS.

6. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH HUNTSVILLE UTILITIES ON THE GAS INSTALLATION WORK AND SCHEDULE ALONG RIDEOUT ROAD.

7. THE CONTRACTOR SHALL CONTACT TRENT HALL, HUNTSVILLE UTILITIES POWER, 24 HOURS PRIOR TO THE CONSTRUCTION OF THE ELECTRICAL INFRASTRUCTURE TO SET UP AN ON-SITE JOB MEETING AT (256) 535-1306 OR (256) 652-8620.

#### REDSTONE TRANSMISSION LINE NOTES:

1. THE CONTRACTOR SHALL NOTIFY REDSTONE ARSENAL, JERRY ROBINSON (256) 876-3122, AT LEAST 48 HOURS IN ADVANCE OF WORK NEAR REDSTONE TRANSMISSION LINES.

2. A CONDUCTOR TO GROUND CLEARANCE OF 24 FEET MUST BE MAINTAINED ON ALL FILLS. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO REDSTONE PROPERTY AND/OR ELECTRICAL OUTAGES CAUSED BY THEIR WORK.

3. THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE SAFETY OF THEIR WORKERS WHEN WORKING IN OR AROUND THE HIGH VOLTAGE TRANSMISSION LINES. THIS WORK SHALL BE PER STATE LAWS AND OSHA REQUIREMENTS FOR WORK NEAR ENERGIZED TRANSMISSION LINES.

4. ANY COUNTERPOISE THAT IS UNCOVERED OR DAMAGED SHALL BE REPAIRED/REBURIED IMMEDIATELY BY THE

CONTRACTOR AT NO EXPENSE TO THE OWNER.

5. REDSTONE HAS THE RIGHT FOR INGRESS AND EGRESS THROUGH THE CONSTRUCTION SITE FOR MAINTENANCE ON THEIR LINES. THE CONTRACTOR SHALL WORK WITH REDSTONE TO ENSURE ACCESS TO THEIR FACILITIES.

#### TVA TRANSMISSION LINE NOTES:

1. THE CONTRACTOR SHALL NOTIFY TVA, BENNY WESTMORELAND, AT (256) 851-3450 AT LEAST 48 HOURS IN ADVANCE OF WORK NEAR TVA TRANSMISSION LINES.

2. A CONDUCTOR TO GROUND CLEARANCE OF 24 FEET MUST BE MAINTAINED ON ALL FILLS. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO TVA PROPERTY AND/OR ELECTRICAL OUTAGES CAUSED BY THEIR WORK.

THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE SAFETY OF THEIR WORKERS WHEN WORKING IN OR AROUND
THE HIGH VOLTAGE TRANSMISSION LINES. THIS WORK SHALL BE PER STATE LAWS AND OSHA REQUIREMENTS FOR WORK
NEAR ENERGIZED TRANSMISSION LINES.
 ANY COUNTERPOISE THAT IS UNCOVERED OR DAMAGED SHALL BE REPAIRED/REBURIED IMMEDIATELY BY THE

CONTRACTOR AT NO EXPENSE TO THE OWNER.

5 TVA HAS THE RIGHT FOR INGRESS AND EGRESS THROUGH THE CONSTRUCTION SITE FOR MAINTENANCE ON THE

5. TVA HAS THE RIGHT FOR INGRESS AND EGRESS THROUGH THE CONSTRUCTION SITE FOR MAINTENANCE ON THEIR LINES. THE CONTRACTOR SHALL WORK WITH TVA TO ENSURE ACCESS TO THEIR FACILITIES.

#### NEC COMMUNICATION LINE NOTES:

1. THE CONTRACTOR SHALL NOTIFY NEC, GARY SHELTON, AT (256) 876-5150 AT LEAST 48 HOURS IN ADVANCE OF WORK NEAR UNDERGROUND COMMUNICATION LINES.

2. NEC HAS THE RIGHT FOR INGRESS AND EGRESS THROUGH THE CONSTRUCTION SITE FOR MAINTENANCE ON THEIR LINES. THE CONTRACTOR SHALL WORK WITH NEC TO ENSURE ACCESS TO THEIR FACILITIES.

### UTILITY CONTACTS:

REDSTONE ARSENAL

DIRECTORATE OF PUBLIC WORKS - POWER CONTACT: JERRY ROBINSON PH: 256-876-3122

DIRECTORATE OF PUBLIC WORKS - TRAFFIC & DRAINAGE CONTACT: TOM RICHARDSON PH: 256-876-7008

EMAIL: JERRY.W.ROBINSON@US.ARMY.MIL

EMAIL: TOM.RICHARDSON1@US.ARMY.MIL

NEC - COMMUNICATIONS
CONTACT: DAVID RUSSELL
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EMAIL: DAVID.RUSSELL@US.ARMY.MIL
CONTACT: JERRY HYATT
PH: 256-876-2766
EMAIL: JERRY.HYATT@US.ARMY.MIL
CONTACT: GARY SHELTON
PH: 256-876-5150

PHONE COMPANIES

CENTURY LINK
CONTACT: ANDY WATWOOD, SR.
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EMAIL: ANDY.WATWOOD@CENTURYLINK.COM

EMAIL: DONALD.SHELTON@US.ARMY.MIL

KNOLOGY CONTACT: STAN HODGES PH: 256-489-6420 EMA**I**L: STAN.HODGES@KNOLOGY.COM

AT&T CONTACT: DEBORA GREGG PH: 256-651-5521 EMAIL: DG5927@ATT.COM

## HUNTSVILLE UTILITIES

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CONTACT: RICHARD KNOX
PH: 256-535-1282
EMAIL: RKNOX@HSVUTIL.ORG

CONTACT: JOEL PERRY
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EMAIL: JOEL.PERRY@HSVUTIL.ORG
WATER

WATER CONTACT: JUSTIN YORK PH: 256-535-1403 EMAIL: JUSTIN.YORK@HSVUTIL.ORG

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11/14/2011

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Atlanta, Georgia

REDSTONE GATEWAY - RIDEOUT ROAD INTERIM IMPRICATE OF HUNTSVILLE

